AMENDMENTS TO THE CLAIMS

This listing of the claims replaces any and all prior versions and listings of claims in the application:

1. (Currently Amended) An article having nanoscale patterning, said article comprising:

a substrate;

a plurality of self assembled pillars formed on said substrate, [from a constant volume of material rendered deformable, said pillars interconnected on a substrate by said material,] said plurality of self assembled pillars having a height ranging from above 1 nm to below 1μm.

2. (Original) The article of claim 1, wherein said height is in the range of about 100 nm to about 700 nm.

3. (Original) The article of claim 1, wherein said height is in the range of about 250 nm to about 550 nm.

4. (Original) The article of claim 1, wherein said self assembled pillar on the substrate has a diameter, said pillar height to pillar diameter ratio being in a range of about 0.1 to about 0.5.

5. (Original) The article of claim 1, wherein said plurality of self assembled pillars on the substrate are in a periodic array.

6. (Original) The article of claim 1, wherein said plurality of self assembled pillars on the substrate has a period of about 1μm to about 10μm.

7. (Original) The article of claim 1, wherein said plurality of self assembled pillars on the substrate has a boundary defined by a pattern on a mask used to form said plurality of pillars.

8. (Original) The article of claim 1, wherein said plurality of self assembled pillars on the substrate are merged to form a single mesa under a mask protrusion.

9. (Original) The article of claim 1, wherein said nanoscale patterning is substantially identical in lateral size as a mask used to form said nanoscale patterning.

10. (New) A method of forming a structure, comprising:

providing a first wafer having a first pattern thereon;

providing a second wafer having a second pattern thereon;

placing a layer of material on the first wafer;

placing the second wafer at a distance above the first wafer;

maintaining the second wafer at a substantially constant distance above the layer of material on the first wafer; and

allowing self-assembly of a pattern between the second pattern of the second wafer and the first pattern of the first wafer, said step of allowing self-assembly of a pattern including rendering the material on the first wafer deformable.

11. (New) The method of claim 10, wherein the material is selected from the group consisting of semiconductors, dielectrics, metals, polymers, monomers, and combination thereof.

12. (New) The method of claim 10, wherein the step of allowing self assembly further comprises heating the material to a temperature at which the material becomes flowable.

13. (New) The method of claim 12 wherein the step of heating consists of laser heating, light heating, microwave induction, heat radiation, contact heating or combinations thereof, and wherein heating is pulsed or continuous or combinations thereof.

14. (New) The method of claim 10, wherein the first wafer is selected from the group consisting of semiconductors, dielectrics, metals, polymers, monomers, and combination thereof.

15. (New) The method of claim 10, wherein the second wafer is selected from the group consisting of semiconductors, dielectrics, metals, polymers, monomers, and combination thereof.

16. (New) The method of claim 10, wherein the self assembled pattern comprises a plurality of pillars.

17. (New) The method of claim 10, wherein the first pattern is electrical conductive material.

18. (New) The method of claim 10, wherein the second pattern is a conductive material.

19. (New) The method of claim 10, wherein the self assembled pattern between the second pattern of the second wafer and the first pattern of the first wafer is at locations that are a nearest distance between the first pattern and the second pattern.

20. (New) The method of claim 10, wherein the step of self-assembly further comprises a chemical reaction.